

CLAIMS

1. A manufacturing process for a microwave corrugated-horn antenna (5) using waveguide technology, characterized in that it consists in forming the corrugations (6) of the horn on the external surface of a block of synthetic foam (3) and in then metallizing the surface of the conformed block of foam in order to form the antenna.
2. The process as claimed in claim 1, wherein the corrugations of the horn are formed by hot pressing of the block of foam in a mold (4).
3. The process as claimed in claim 1 or 2, wherein the metallization of the surface of the block of foam is carried out by projection or using a brush, or alternatively by dipping.
4. The process as claimed in one of claims 1 to 3, wherein two radial slots (8, 10) are formed in a cylindrical section of the block of foam by thermoforming and the surface of this section of the block of foam is metallized in order to form a waveguide polarizer.
5. The process as claimed in one of claims 1 to 4, wherein a circular groove (12) is formed in another section of the block of foam by thermoforming and the surface of this other section of the block of foam is metallized in order to form an impedance adapter.